

### F/A-18 Hornet

An all-weather fighter and attack aircraft. In fighter mode, the Hornet is used as an escort and for fleet air defense. In attack mode, it is used for force protection and close and deep air support.



Above, this 1990 photo shows an AEDC engineer checking out a scale model of a HARM missile attached to an F/A-18 model before the start of a wind tunnel test in the center's four-foot transonic wind tunnel.





### F-14 Tomcat

The F-14 has high-speed and ultra-long-range weapons that can engage six aerial targets at once and is capable of killing hostile bombers 90 miles away, before having the chance to launch an attack.



An F-14 Tomcat model is being readied in 1989 for a store separation test in AEDC's four-foot transonic wind tunnel.

HARM: High-speed Anti-Radiation Missile (used in Operation Enduring Freedom)



A long-range, subsonic cruise missile used for land attack launched from surface ships and submarines.

Used against Iraq during Operation Desert Storm, the Tomahawk Cruise Missile is once again being called upon for Operation Enduring Freedom against the Taliban in Afghanistan. It is shown here in a 1975 test in the center's 16-foot transonic wind tunnel.



## JSOW

The Joint Standoff Weapon is the first in a joint Air Force/Navy family of low-cost, highly lethal glide weapons used against heavily defended targets. It is an air-to-surface missile with Global Positioning Satellite guidance.



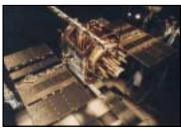
A 10- percent scale B-1B Lancer aircraft model is mounted from the floor upside down in the center's 16-foot transonic wind tunnel and a 10-percent scale JSOW is mounted on a moveable support in preparation for store separation testing in August 2000.

## **JDAM**

The Joint Direct Attack Munition is a joint Air Force and Navy system carried by bombers and fighters. It is an upgrade for the existing inventory of general-purpose bombs that integrates them with a GPS guidance kit providing accurate all-weather attack capabilities.



The Navstar GPS satellite underwent a four-month series of qualification tests determining the satellite can withstand the extremes of heat and cold in space in the Mark I Space Environmental Chamber in 1985.





AEDC's 4T-pitch sector maneuvers the 500-pound JDAM in this 1998 test.

# More testing

**GBU-28** 

**AGM-84** 

These weapons systems have undergone testing in the center's wind tunnels.

AIM-9 Sidewinder